

CLAIMS

- 5 1. A micro electromechanical switching structure comprising a switching element comprising a first switching support, a switching actuator control electrode, and a switching beam having a first end and a second end, the first end of the switching beam being supported by the first switching support, **characterized in that** the micro electromechanical switching structure further
- 10 comprises:
- a first reconfiguration support, spaced apart from the first switching support;
 - a first reconfiguration beam comprising a first end and a second end, the first end of the first reconfiguration beam being supported by the
 - 15 first reconfiguration support and the second end of the first reconfiguration beam being supported by the first switching support;
 - a first reconfiguration actuator control electrode being arranged between the first reconfiguration support and the first switching support;
- and in that:
- 20 - the first switching support being ductile to thereby enable transfer to the switching beam of tension variations of the first reconfiguration beam caused by actuation of the first reconfiguration beam by means of the first reconfiguration actuator control electrode, which actuation thereby changes characteristics of the switching element.
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2. The micro electromechanical switching structure according to claim 1, **characterized in that:**
- the first switching support is horizontally ductile.
- 30 3. The micro electromechanical switching structure according to claim 1 or 2, **characterized in that:**
- the first reconfiguration support is an anchor.

4. The micro electromechanical switching structure according to any one of claims 1 to 3, **characterized in that:**

- the switching element further comprises a second switching support,
5 the second end of the switching beam being supported by the second switching support.

5. The micro electromechanical switching structure according to claim 4, **characterized in that:**

- 10 - the second switching support is an anchor.

6. The micro electromechanical switching structure according to claim 4, **characterized in that** the micro electromechanical switching structure further comprises:

- 15 - a second reconfiguration support, spaced apart from the second switching support;
- a second reconfiguration beam comprising a first end and a second end, the first end of the second reconfiguration beam being supported by the second reconfiguration support and the second end of the first
20 reconfiguration beam being supported by the second switching support;
- a second reconfiguration actuator control electrode being arranged between the second reconfiguration support and the second switching support;

and in that:

- 25 - the second switching support being ductile to thereby enable transfer of tension variations of the second reconfiguration beam caused by actuation of the second reconfiguration beam by means of the second reconfiguration actuator control electrode, to the switching beam.

30 7. The micro electromechanical switching structure according to claim 6, **characterized in that:**

- the second switching support is horizontally ductile.

8. The micro electromechanical switching structure according to claim 6 or 7, **characterized in that:**

- the second reconfiguration support is an anchor.

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9. A micro electromechanical switching arrangement comprising a switching element comprising a first support, an actuator control electrode, and a switching beam having a first end and a second end, the first end of the switching beam being supported by the first support, **characterized in**

10 **that** the micro electromechanical switching arrangement further comprises:

- a switching beam position measurement device, which generates a beam position signal related to a position of the switching beam in relation to a position of the actuator control electrode;
- an actuator control signal unit, which generates an actuator control signal in dependence on the beam position signal and a desired switching beam position signal, the actuator control signal being coupled to the actuator control electrode.

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10. The micro electromechanical switching arrangement according to claim 9, **characterized in that:**

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- the switching element further comprises a second support, the second end of the switching beam being supported by the second support.

11. The micro electromechanical switching arrangement according to claim 9 or 10, **characterized in that:**

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- the switching beam position measurement device utilizes capacitive measurement methods for generating the beam position signal.

12. The micro electromechanical switching arrangement according to any one of claims 9 to 11, **characterized in that:**

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- the switching beam position measurement device comprises a variable capacitance element and a Wheatstone bridge in which the variable capacitive device is one element.